AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1.   (Currently Amended) A method for controlling a diaphragm or piston pump that is actuated via a ram or a connecting rod by a cam which is powered by an electric motor, ~~characterised in that~~ <u>comprising</u>

<u>moving</u> the diaphragm or piston of the pump ~~is moved~~ by the drive unit of the cam at approximately constant speed throughout the compression stroke, taking into account the position of the cam, to assure an approximately constant volume flow of the metered medium.

2.   (Currently Amended) The method ~~according to~~ <u>of</u> claim 1, ~~characterised in that~~ <u>wherein</u>

the drive unit drives the cam during the compression stroke with a rotating speed profile that compensates for temporal cosinusoidal movement of the piston or diaphragm conditioned by the cam.

3.   (Currently Amended) The method ~~according to~~ of claim 1 ~~or 2~~, ~~characterised in~~ ~~that~~ <u>wherein</u>

the speed profile of the drive unit has approximately the shape

$$\omega(t) = 2/T_D \times (1 - (- 2/T_D \times t + 1)^2)^{-1/2}$$

in the compression stroke throughout the period of constant diaphragm speed.

4.   (Currently Amended) The method ~~according to any of the preceding claims~~ <u>of</u> <u>claim 1</u>, ~~characterised in that~~ <u>wherein</u>

the drive unit moves the cam with a different speed profile, particularly with constant

and/or higher speed, during the aspiration stroke.

5.   (Currently Amended) The method ~~according to any of the preceding claims~~ of

claim 1, ~~characterised in that~~ wherein

the delivered volume flow of metered medium is increased shortly before the end of the

compression stroke in order to compensate for the metering gap during the aspiration

stroke.

6.   (Currently Amended) The method ~~according to any of the preceding claims~~ of

claim 1, ~~characterised in that~~ wherein

an EC motor, preferably with integral rotor position sensors, is used as the drive unit.

7.   (Currently Amended) The method ~~according to any of the preceding claims~~ of

claim 1, ~~characterised in that~~ wherein

in order to control the cam speed, the cam position is captured by a sensor and/or is

calculated from position sensor signals that are in the drive unit.